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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

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| 09/215,421 | 12/18/1998 | PAUL CHANG | 16845-3 | 7395 |
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7590 02/13/2003

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EXAMINER

SCHULTZ, WILLIAM C

| ART UNIT | PAPER NUMBER |
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2664

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

09/215,421

Applicant(s)

CHANG ET AL.

Examiner

William C. Schultz

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6, 7, 12-19, 22-25, 28-30 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-30 and 32-36 is/are allowed.
- 6) ☒ Claim(s) 1-4, 6, 7, 12-19 and 22-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,6-7,12-19, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kahkoska et al. [U.S. Pat. 6,002,671] and further in view of Kennedy et al. [U.S. Pat. 5,982,851].

Regarding claims 1,16,22, Kahkoska et al. discloses a test set for testing a communications network comprising: **(figure 2)** at least one signal input port; **(fig. 4, lines under 106)** test circuitry coupled to the at least one signal input port, the test circuitry receiving signals from the signal input port and generating test data; **(fig. 4, part 100)** a processor coupled to the test circuitry, the processor receiving test data and generating test results; **(fig. 4, part 122)** a user input device coupled to the processor, the user input device sending commands to the processor; and **(fig. 4, part 128)** a display operatively coupled to the processor, the display receiving and showing the test results, wherein **(fig. 4, part 132)**

the test set is capable of performing line qualification and connectivity testing. **(col. 3, lines 5-15)**

wherein the connectivity testing includes loopback testing. **(col. 3, lines 5-15 – a ping is a loopback)**

Kahkoska et al. fails to disclose the connectivity testing includes bit error rate testing. Kahkoska does disclose the connectivity testing includes throughput testing. **(col. 2, line 53- col. 3, line 15)** In throughput testing it is well understood in the art that to perform the test, the test unit must measure, i.e. count, the number of errors that occurred or the number good bits received in a unit of time. If the number of errors increases, the throughput decreases. In essence Kahkoska is performing the steps of a bit error rate test but is reporting it as a data throughput.

Kennedy et al. discloses performing a bit error rate test upon an isdn line using a portable testing device. Kennedy further discloses that a bit error rate test is one of the most common tests performed by a craftsperson, maybe the only test performed to determine if the line is operational. **(col. 2, lines 60-65)** Kennedy further discloses that the bit error rate test is the reported number of errors per unit time. **(col. 4, lines 19-28)**

It would be obvious to one skilled in the art at the time of invention to modify Kahkoska with Kennedy to perform a BERT because as Kenndey discloses above that it is the most common type of line testing performed by technicians.

Regarding claim 2, Kahkoska et al. further discloses line qualification includes transmission line tests, the transmission line tests includes at least one of digital multimeter tests, transmission impairment measurement set (TIMS) tests, and time domain reflection (TDR) tests. **(abstract)**

Regarding claims 3,4, Kahkoska et al. further the graphical display shows selected ones of the test results in a graphical form. **(col. 5, lines 33-36; col. 7, lines 65-68)**

Regarding claims 6,19, Kahkoska et al. further discloses connectivity testing is performed using a predetermined transmission technology. **(abstract)**

Regarding claims 7,15, Kahkoska et al. discloses the use of E1, T1, ISDN, DSL, HDSL, ADSL, and xDSL. **(col. 8, lines 25-40)**

Regarding claims 12,23, Kahkoska et al. discloses a modem module operatively coupled to the processor, the modem module receiving and processing the test data and generating processed results, and wherein the display receives and displays the processed results. **(abstract, lines 2-6; figure 2; fig. 4, part 132 – the figure discloses the modem, 12, being operatively coupled to the processor, 122, which then displays result using the display, 132)**

Regarding claims 13,24, Kahkoska et al. further discloses the modem module includes a device for storing an identification value that identifies the modem module to the test set. **(figure 2)** Item 107 in figure 2 is a lan connection as identified in figure 2. **(col. 4, lines 30-45)** To communicate on a lan the ADSL modem must have a nic in it and every nic has a unique mac address so that it can communicate on a lan. The unique address is stored in the nic and the test set must use that address (identification value) to communicate with the ADSL modem.

Regarding claim 14, Kahkoska et al. further discloses the modem module is configured to perform xDSL connectivity testing. **(fig. 2, part 12)**

Regarding claim 17, Kahkoska et al. further discloses line qualification includes digital multimeter tests, time domain reflection tests, and transmission line impairment tests. **(col. 1, line 64- col. 2, line 3)**

Regarding claim 25, Kahkoska et al. further discloses the modem module determines a maximum transmission rate on the communications network based on the processed results. **(col. 3, lines 28-31)**

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***Allowable Subject Matter***

Claims 28-30,32-36 are allowed.

***Response to Arguments***

Applicant's arguments with respect to claims 1-4,6-7,12-19,22-25 have been considered but are moot in view of the new ground(s) of rejection. The finality of the last Office Action has been withdrawn.


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Schultz whose telephone number is 703-305-2367. The examiner can normally be reached on M-F(7-4)(first bi-week) M-Th(7-4)(second bi-week) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and the same for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

William Schultz  
February 8, 2003

  
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